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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,470	03/25/2004	Steven M. Hansen	AD7006USNA	8340

23906 7590 04/21/2006

E I DU PONT DE NEMOURS AND COMPANY  
LEGAL PATENT RECORDS CENTER  
BARLEY MILL PLAZA 25/1128  
4417 LANCASTER PIKE  
WILMINGTON, DE 19805

EXAMINER
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ZEMEL, IRINA SOPJIA

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/809,470

Applicant(s)

HANSEN ET AL.

Examiner

Irina S. Zemel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 14-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 30-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102/103***

Claims 1-8, 11, 13, 30-31 are rejected under 35 U.S.C. 102(a or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over WO 02/0837794 to E.

I. DuPont De Nemours, (hereinafter "DuPont").

The rejection stands as per reason of record.

Insofar as the newly introduced limitation of "thermoplastic" polyester, this limitation is fully met by the disclosed thermoplastic polyesters. See, for example, page 4. Insofar as newly introduced limitation to the forming a slurry of the microfiber material into a slurry, once again, this limitation is a process step limitation in the product claim. As expressly discussed in the previous office action, when the claims are directed to the product and not the process (even though the product is claimed in the product-by-process format), the patentability of the product claims depends solely on the product characteristics regardless of the process by which the product was obtained. So long as the claimed product and the product disclosed in the prior art exhibit same properties, the product is deemed unpatentable over the prior art. In the instant case, since the size and the composition of the microfibers in the reference is identical to the claimed microfibers, it is reasonable believed that the compositions disclosed in the DuPont reference inherently exhibit the same properties as the claimed composition, thus meeting the claim limitations. The burden was shifted to the applicants to provide evidence to the contrary. However, no evidence is presented on the record to

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demonstrate that the claimed compositions that are using the fibers obtained by a specified method are any different from the compositions disclosed in the reference.

Claims 1-5, 7-8, and 30-32 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US Patent 6,068,922 to Vercesi et al., (hereinafter "Vercesi").

The rejection stands as per reasons of record.

### ***Claim Rejections - 35 USC § 103***

Claim 12, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over DuPont.

The rejection of claim 12 stands as per reason of record. The applicants are correct in their assumption that the rejection set forth on page 5 of the previous office action was intended to claim 12. The examiner regrets any inconvenience this error may have caused the applicants.

As far as the newly added claims 33 and 34, the DuPont reference expressly discloses that the diameter of the fibers is less than 150 um, thus implying that fibers with any diameter lower than 150 um (including those of diameter of nanometer dimensions which, according to the applicants own admission on page 6 of the instant specification are well known and commercially available) are suitable for the invention, absent showing of unexpected results that can be clearly attributed to the fiber dimension. The Dupont reference further expressly states that the length of the fibers can be as low as 0.1 mm (or 100 um) and the surface area is preferably exceeds 6

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m<sup>2</sup>/g, which again, implies that fibers with any BET higher than 6 are suitable for the invention absent showing of unexpected results. Fibers of high BET are well known in the art (see, for example, referenced 2,999,788 patent).

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vercesi.

The disclosure of the Vercesi reference is discussed above and in the previous office action. The reference further expressly discloses that additional fibers, such as carbon or glass fibers may be added to the compositions (see column 2, lines 37-49), thus making obvious use of expressly disclosed components in the compositions of Vercesi (in addition to aramid fibers, since the claims are not limited to onl one type of fibers), therefore meeting the limitations of claims 9 and 10.

### ***Response to Arguments***

Applicant's arguments filed 2-9-2006 have been fully considered but they are not persuasive. Regarding the argument concerning the Dupont (Phillipoz) reference, the applicants argue that the reference does not disclose the microfibers are produced in the form of slurry. The examiner wishes to point out that she never alleged that the DuPont reference discloses the process of preparing the fibers as claimed by the applicants. However, once again, the claims are NOT directed to the process of making of either the compositions or the fibers. As such, the patentability of the product claims depends solely on the product characteristics regardless of the process by which

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the product was obtained. There is NO evidence on the record that provide support for patentability or any data that demonstrates patentable distinction of the claimed product over the disclosed compositions. Moreover, the claims do NOT even require that the microfibers are added to the composition in the form of slurry. All the claim states that the microfibers are obtained by the claimed steps and then form a slurry. After forming the slurry the claims are completely open to further treatment of the fibers or any other steps. In other words, the fibers can be dried from slurry and added to the polyester and still FULLY met the claim limitations, etc., etc. The bottom line is that the claims are drawn to the composition containing two components, and for the reasons set forth above, the claimed compositions are considered to be identical to the compositions disclosed in the reference. The burden was shifted to the applicants to provide evidence of patentable differences between the claimed product and the product disclosed in the reference, but the applicants failed to provide any evidence or even arguments to that matter.

Regarding the arguments concerning Vercesi reference, the arguments, at best, are not understood. The applicants state that the reference teaches away from using slurries. First of all, as per discussion above, this is irrelevant to the claimed product in the absence of showing of evidence supporting the patentable difference between the claimed and disclosed compositions. But n even more interesting is that the referenced lines in column 3 specifically refer to "moist" aramid fibers with moisture content as high as 85%. It is not clear, in this case, what is a slurry if not a composition containing fibers and up to 85 % of volatile liquid.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irina S. Zemel whose telephone number is (571)272-0577. The examiner can normally be reached on Monday-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571)272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ISZ

A handwritten signature in black ink, appearing to read "Irina Zemel". The signature is fluid and cursive, with the first name "Irina" and last name "Zemel" clearly distinguishable.

**IRINA ZEMEL  
PRIMARY EXAMINER**